

REMARKS

Applicant appreciates Examiner Chen's participation in a telephone interview with Applicant's attorney on December 15, 2005. During the interview, the present claim amendments as submitted in connection with the present Request for Continued Examination were discussed. It is believed that the present amendments place the application in condition for allowance and such allowance is respectfully requested.

Claims 1-19 are pending in the present application. Claim 1 is amended above. No new matter is added by the claim amendments. Entry is respectfully requested.

The Applicants note, with appreciation, that the Office Action of September 14, 2005 indicates at page 4, paragraph 4, that claims 10-19 are allowed.

Claims 1-9 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Pradeep, *et al.* (U.S. Patent Number 6,821,904). Reconsideration of the rejection and allowance of claims 1-9 are respectfully requested.

In the present invention as claimed in independent claim 1, a method of manufacturing a multi-thickness gate dielectric layer of a semiconductor device includes forming a first dielectric layer on a semiconductor substrate of a first thickness, forming a second dielectric layer of a second thickness on the top surface of the first dielectric layer, and further selectively removing a portion of the second dielectric layer with etch selectivity to the first dielectric so as to selectively expose a portion of the top surface of the first dielectric layer under the second dielectric layer to form a gate dielectric layer including a thick portion formed of the first dielectric layer and remaining second dielectric layer and a thin portion formed of the exposed first dielectric layer, the thin portion being of the first thickness and the thick portion being of a combined thickness of the first thickness and the second thickness (see the specification at page 9, lines 4-16 and at page 10, lines 1-5).

In Pradeep, *et al.*, a single thick layer 18 of gate oxide is formed on a substrate 10. A photoresist mask 20 is formed over a portion of the surface of layer 18 in order to reduce the thickness of the layer 18 in a region of the device where a thin layer of gate oxide is desired, creating two regions with different thicknesses in layer 18. The thin region of layer 18 is thus formed as a result of an etching process, and the resulting thickness of the thin region of layer 18 is determined according to the degree of etch. The thick region of layer 18 is the original thickness, and the thin region is a reduced thickness of the original thickness (see Pradeep, *et al.* column 4, lines 8-26).

Pradeep, *et al.* fails to teach or suggest “forming a first dielectric layer on a semiconductor substrate having a first thickness”, “forming a second dielectric layer of a second thickness on a top surface of” a “first dielectric layer”, and “selectively removing a portion of the second dielectric layer with etch selectivity to the first dielectric so as to selectively expose a portion of the top surface of the first dielectric layer under the second dielectric layer to form a gate dielectric layer including a thick portion formed of the first dielectric layer and remaining second dielectric layer and a thin portion formed of the exposed first dielectric layer, the thin portion being of the first thickness and the thick portion being of a combined thickness of the first thickness and the second thickness”, as claimed in claim 1 of the present invention. Instead, in Pradeep, *et al.*, layer 18 is formed to an original thickness, which is the thickness of the thick region of layer 18, and the thin region is of a thickness that is a reduced thickness of the original thickness of layer 18. Therefore, Pradeep, *et al.* fails to teach or suggest “the thin portion being of the first thickness and the thick portion being of a combined thickness of the first thickness and the second thickness”. Namely, the thin portion of the present invention is of the first thickness as originally deposited. In contrast, in Pradeep, *et al.*, the thick region is of the first thickness and the thin region is of a thickness that is a reduced thickness of the thick region. Therefore, the thickness of the thin region in Pradeep, *et al.* is not its thickness as originally deposited.


It is therefore submitted that independent claim 1 is allowable over Pradeep, *et al.* Reconsideration of the rejection of claim 1 under 35 U.S.C. 103(a) as being unpatentable over Pradeep, *et al.*, and allowance of the claim, are respectfully requested. With regard to the rejection of dependent claims 2-9 as being unpatentable over Pradeep, *et al.*, it follows that these claims should inherit the allowability of the independent claim from which they depend.

Closing Remarks

It is submitted, assuming entry of the present Amendment, that all claims are in condition for allowance, and such allowance is respectfully requested. If prosecution of the application can be expedited by a telephone conference, the Examiner is invited to call the undersigned at the number given below.

Respectfully submitted,

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